

REMARKS

In the Specification

Applicants have amended the application for clarity as follows.

The terms “optical phase filter” or “phase filter” are substituted in paragraphs [0033], [0034], [0035], and [0047] for other terms used to describe item 14 of FIG. 1, which is first introduced as “optical phase filter 14,” for consistency.

The term “system” is substituted in paragraphs [0033] and [0036] for other terms used to describe item 10 of FIG. 1, which was first introduced as “optical system 10,” for consistency.

In paragraph [0035], a word “the” is changed to “a” to properly introduce a passband.

Greek letters are substituted throughout for the spelled-out English equivalents of these letters (e.g., “ α ” has been substituted for “alpha”).

In paragraph [0036], the reference to “detector 16” is changed to “detector 18” to correspond to the detector of FIG. 1 (supported by the introduction of detector 18 in paragraph [0032]).

In paragraph [0042], the reference to “direction 49” is changed to “directions 49(1), 49(2)” to correspond to the directions indicated in FIG. 2F.

In paragraph [0047], the reference “on the first side 21 of each filter 14” is changed to “on a first side 21(1) of phase filter 14C(1) and on a first side 21(2) of phase filter 14C(2)” to correspond to the sides indicated in FIG. 2G.

In paragraph [0053], a word “the” is changed to “an” to properly introduce an aperture. In paragraph [0055], a word “an” is added to properly introduce an optical imaging system.

In paragraph [0059] through [0062], items 100 and 116 in FIG. 4 and FIG. 5 are relabeled as 100' and 116', respectively, in accordance with changes made in FIG. 4 and FIG. 5 (see note on FIG. 4 and FIG. 5 below under “In the Drawings”).

IN THE DRAWINGS

The ten attached sheets of formal drawings replace the previous informal drawing sheets containing FIG. 1, FIG. 2A, FIG. 2B, FIG. 2C, FIG. 2D, FIG. 2E, FIG. 2F, FIG. 2G, FIG. 2H, FIG. 3, FIG. 4, FIG. 5, FIG. 6, FIG. 7 and FIG. 8.

No new matter is added to the drawings through any of the changes.

ATTACHMENTS: REPLACEMENT SHEETS.

Replacement sheets for FIG. 1, FIG. 2A, FIG. 2B, FIG. 2C, FIG. 2D, FIG. 2E, FIG. 2F, FIG. 2G, FIG. 2H, FIG. 3, FIG. 4, FIG. 5, FIG. 6, FIG. 7 and FIG. 8 are pages 20-30 of this paper.

In paragraphs [0063] and [0064], references to items 202 and 204 of FIG. 7 are changed to 302 and 304, respectively, in accordance with the numbering changes made in FIG. 7 (see note on FIG. 7 below under “In the Drawings”). Also in paragraph [0063], the description “digital signal processor 112” is changed to “post processor 112” for consistency with the labeling in FIG. 4 and FIG. 5.

In paragraph [0067], the reference to “form 202, FIG. 6” has been changed to “form 302, FIG. 7” to refer to the correct figure, and in accordance with the numbering change made in FIG. 7. Also in paragraph [0067], the word “a” is replaced by the intended “ α ” and is placed adjacent to the mathematical term “ $r^3 \cos(3\theta)$.” The use of “ α ” is supported in paragraph [0064] and Eq. 6 therein.

In paragraph [0072], the references to “wavefront 52” and “wavefront 402” have been changed to “wavefront 403” to correspond with the correct item in FIG. 8. Also in paragraph [0072], the word “as” is substituted for “a” to correct a typographical error. Also in paragraph [0072], a set of parentheses is added, and the words “image 420” are changed to “an image” to remove an incorrect reference. This change is supported by FIG. 4 and in paragraph [0059] (i.e., post processor 112 processes an image to remove effects of wavefront filters 102 and 104, but post processor 112 does not process image 420).

No new matter is added to the specification in this or any other amendments made herein.

In the Claims

Claim 5 is amended to change the word “aspheres” to “aspherical optical elements.” The term “aspherical optical elements” is supported in the specification at paragraph [0055].

Claim 13 is amended by changing the word “effect” to “affect” to correct a typographical error. Claim 13 is also amended by changing the phrase “an amount of the image properties” to “a magnitude of at least one of the image properties,” and changing the phrase “amount of image properties” to “magnitude.” The claim as amended is supported in the specification at paragraphs [0061] and [0062].

Claim 19 is amended to correct a typographical error in an equation. The corrected equation is supported in the specification at paragraph [0063] and Eq. 5 therein.

Claim 22 is amended by changing the word “effect” to “affect” to correct a typographical error. Claim 22, as amended, is supported in the specification at paragraph [0062].

No new matter is added to the claims.

In the Drawings

A set of formal drawings is supplied to replace the informal drawings originally filed.

FIG. 2D and FIG. 2E have been amended to substitute the Greek letter Δ for the word “delta.”

FIG. 2F has been amended to substitute the numerals 49(1) and 49(2) for two instances of the numeral 49.

FIG. 2G has been amended to substitute the numerals 21(1) and 21(2) for two instances of the numeral 21.

FIG. 4 and FIG. 5 have been amended to substitute the numerals 100' and 116' for 100 and 116, respectively, to show that these items are different from items 100 and 116 in FIG. 3. Item 100 in FIG. 3 contains an image 110, but item 100' in FIGS. 4 and 5 contain a final image 114; item 116 in FIG. 3 is a motor and controller but item 116' in FIGS. 4 and 5 is an automatic motor and controller. Corresponding changes have been made in the specification at paragraphs [0059] through [0062] as noted above.

FIG. 7 has been amended to substitute the numerals 302 and 304 for the numerals 202 and 204, since numerals 202 and 204 were also used in FIG. 6. Corresponding changes have been made in the specification at paragraph [0063] as noted above.

No new matter has been added to the drawings.

Applicants believe no fees are due in connection with this preliminary amendment; however, if any fee is deemed necessary, the Commissioner is hereby authorized to charge Deposit Account 12-0600.

If questions arise in connection with this preliminary amendment, the Examiner is encouraged to telephone the undersigned attorney.

Respectfully submitted:

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